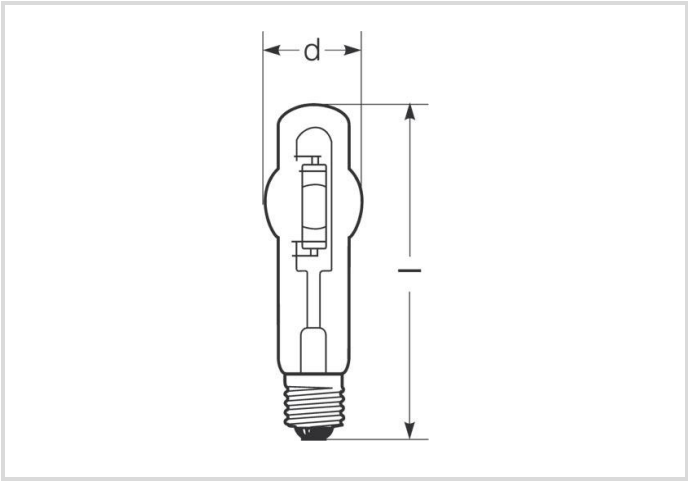
Metal halide lamp with quartz burner

HRI-BT 400W/D/PRO/230/E40

Radium

Product Datasheet Date: 30.10.2026





A	G	34000	5500K	12 000h

General Data

Article No.	32418883
Code	HRI-BT 400W/D/PRO/230/E40
Product EAN	4008597188831
Box quantitiy (pcs.)	12
EAN Box	4008597488832
Gross weight of box in kg	3.146
Length of box in m	0.317
Width of box in m	0.248
Height of box in m	0.343
Product weight	200 g
Product status	Inactive

Electric Parameters

Wattage	425.5 W
Lamp nominal wattage	400 W
Lamp voltage	115-125 V
Lamp voltage	122 V
Mains voltage	230 V

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Electric Parameters

Ignition voltage	4.0 up to 5.0
Lamp's nominal current	4 A
Nominal choke current	4.6 A
Compensation capacitor for 50Hz operation	45 µF
dimmable	No

Light Application Parameters

Luminous flux	34000 lm
Rated lamp luminous flux	34000 lm
Efficacy / Luminous efficiency	79.91 lm/W
Total mains efficacy	80 lm/W
Light colour	daylight
Colour temperature	5500 K
Color rendering index	92
Lumen maintenance at 2000h	0.83
Lumen maintenance at 4000h	0.76
Lumen maintenance at 6000h	0.70
Lumen maintenance at 8000h	0.65
Lumen maintenance at 12000h	0.55
Lumen maintenance at 16000h	0.50

Service Life

Average life	12000 h
Lamp survival factor at 2000h	0.99
Lamp survival factor at 4000h	0.98
Lamp survival factor at 6000h	0.95
Lamp survival factor at 8000h	0.81
Lamp survival factor at 12000h	0.50

Specification

Energylabel notice	old label, no EPREL registration, no EU data sheet
Energylabel (G -> A)	G
Energylabel (E -> A++)	A
Diameter	62 mm
Length	285 mm
Total length max.	285 mm

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Specification

Burning position	h180
Mercury content	59.0 mg
Lamp shape	Tube, single-ended
Model	Clear
Base	E40
Colour	White

Notes on Operation

Burning position	h180

Information especially for EPREL

Energylabel notice	old label, no EPREL registration, no EU data sheet
Lighting technology	MH
EPREL ID number	868897

Miscellaneous

EU Directive	TIM
Similar products	32417735

Notes

Metal halide lamp with quartz burner, tubular bulb clear, daylight, base E40. Operation in enclosed luminaire, with ballast and ignitor.

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.
The "lifespan L70" described for LED lamps indicates the number of hours when the luminous flux has decreased to 70% of its initial value.
The optinal field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

Base

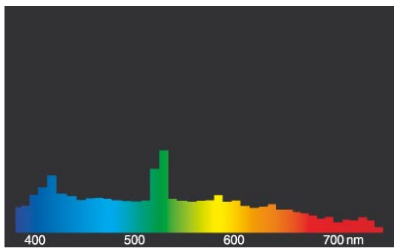


E40
IEC/EN 60061-1
sheet 7004-24-6

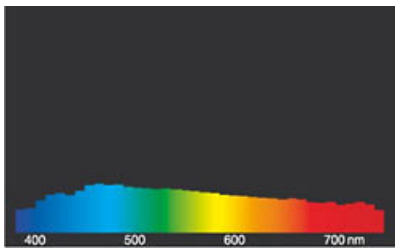
Spectrum

Natural daylight is a mixture of direct sunlight and the light of the sky. Therefore, its spectral composition changes permanently due to the changing time of day. The standardised light classification D65 corresponds to a daylight with a colour temperature of approximately 6500 K.
Every discharge lamp type has got an individual spectral power distribution according to its chemical filling. From this result important properties light colour or colour rendering.
Should the spectral lines be very close together the lamp presumably has got a very good colour rendering index, so, Ra might be near 100. Does the spectrum rather look like single lines or frayed out the colour rendering of the lamp will probably be not as good.
If number and height of the spectral lines within the blue range (around 400 nm) prevails it might be a lamp with a rather cold light colour like for

example daylight. On the other hand, should the red (around 700 nm) or the red and yellow (around 600 nm) range be dominant one can assume that the lamp will be a rather warm light colour like WDL.
After the lamp start a metal hlide lamp needs about 2-4 minutes time to reach its full luminous flux, all colours in the spectrum are within the discharge arc then.
Visible region from 380 to 780 nm; height of graph corresponding with relative spectral emission (400mW/klm) per 10nm.

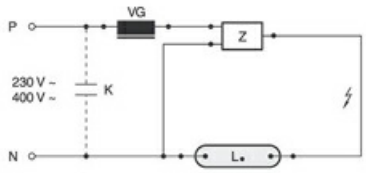


HRI.../D



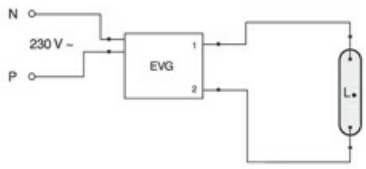
daylight(D 65)

Circuit diagram(s)



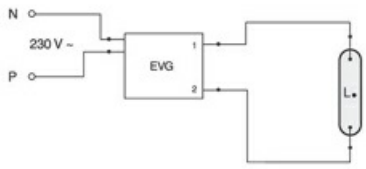
Standard circuit HID with external ignitor
Key:
L. = lamp
VG = electromagnetic ballast (KVG/VVG)
P = phase
N = zero potential
K = p. f. correction capacitor
Z = ignitor

The required control gear (here ignitor and ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.



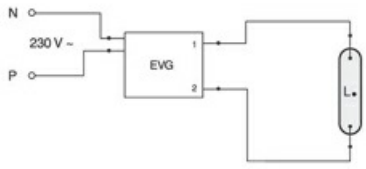
ECG-operation
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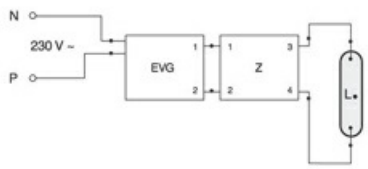


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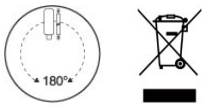
HRI-BT 400W/D/PRO/230/E40



ECG-operation with additional ignitor
Key:
L. = lamp
EVG = electronic ballast
P = phase
N = zero potential
Z = ignitor

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Special features



General notes

The technical design data in accordance with DIN and IEC. The producer does not take any responsibility for damage to persons or property in case of unsuitable operation or handling of the product. Operating data and dimensions are valid within the usual tolerances. Related lamp types (different bases, mains voltages) may be available on request. Sale and delivery are effected in accordance with the Radium Terms of Delivery and Payment valid on the day of conclusion of contract. Packing units offer economical advantages to the purchase and logistic department. Please match your quantity volume accordingly. For orders of a minimum quantity (clefts) with a lamp model the amount lower than the volume of each packaging unit, we will invoice 10 % additional charge per lamp type. Technical changes and terms of delivery are reserved. Manipulation of any kind to packaging or product is not permissible as this will violate Radium brand rights. Furthermore, technical properties of the product can change to its disadvantage or even destruction. Therefore, Radium cannot be responsible for consequential damages.
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All technical data without guarantee.